AMENDMENTS TO THE CLAIMS

Docket No.: 09857/0203487-US0

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A thionucleoside-S-nitrosyl derivative of the following Formula (I) or a salt thereof:

[wherein R^1 represents ribose, 2-deoxyribose or a derivative of either, and R^2 represents a hydrogen atom, an amino group, a hydroxyl group, a halogen atom, a R^3 -oxy group or a R^3 -amino group (wherein R^3 represents an optionally substituted C_{1-15} alkyl group or an optionally substituted C_{1-15} acyl group)].

Claim 2 (original): A thionucleoside-S-nitrosyl derivative of the following Formula (II) or a salt thereof:

Application No. Not Yet Assigned Amendment dated October 21, 2005 First Preliminary Amendment

[wherein R^1 represents ribose, 2-deoxyribose or a derivative of either, and R^2 represents a hydrogen atom, an amino group, a hydroxyl group, a halogen atom, a R^3 -oxy group or a R^3 -amino group (wherein R^3 represents an optionally substituted C_{1-15} alkyl group or an optionally substituted C_{1-15} acyl group)].

Claim 3 (original): A thionucleoside-S-nitrosyl derivative of the following Formula (III) or a salt thereof:

$$\mathbb{R}^{2'}$$
 \mathbb{N}
 \mathbb{S}
 \mathbb{N}
 \mathbb{S}

(wherein R¹ represents ribose, 2-deoxyribose or a derivative of either, and R² represents an oxygen atom, a sulfur atom or an imino group).

Claim 4 (original): A method for preparing a thionucleoside-S-nitrosyl derivative, which comprises reacting a thionucleoside of the following Formula (IV):

[wherein R^1 represents ribose, 2-deoxyribose or a derivative of either, and R^2 represents a hydrogen atom, an amino group, a hydroxyl group, a halogen atom, a R^3 -oxy group or a R^3 -amino group (wherein R^3 represents an optionally substituted C_{1-15} alkyl group or an optionally substituted C_{1-15} acyl group)] with a nitrosyl compound.

Claim 5 (original): A method for preparing a thionucleoside-S-nitrosyl derivative, which comprises reacting a thionucleoside of the following Formula (V):

[wherein R^1 represents ribose, 2-deoxyribose or a derivative of either, and R^2 represents a hydrogen atom, an amino group, a hydroxyl group, a halogen atom, a R^3 -oxy group or a R^3 -amino group (wherein R^3 represents an optionally substituted C_{1-15} alkyl group or an optionally substituted C_{1-15} acyl group)] with a nitrosyl compound.

Claim 6 (original): A method for preparing a thionucleoside-S-nitrosyl derivative, which comprises reacting a thionucleoside of the following Formula (VI):

(wherein R¹ represents ribose, 2-deoxyribose or a derivative of either, and R² represents an oxygen atom, a sulfur atom or an imino group) with a nitrosyl compound.

Claim 7 (currently amended): An oligonucleic acid comprising the derivative according to any one of claimsclaim 1 to 3 or a salt thereof.

Claim 8 (original): The oligonucleic acid according to claim 7, which has a length of at least 12 bases.

Claim 9 (currently amended): A method for transferring a nitrosyl group, which comprises reacting the oligonucleic acid according to claim 7-or-8 with its complementary strand to transfer the nitrosyl group contained in the oligonucleic acid to a corresponding base in its complementary strand.

Claim 10 (currently amended): A method for mutagenesis of a nucleotide sequence, which comprises reacting the oligonucleic acid according to claim 7-or-8 with its complementary strand, and treating the resulting reaction product under acidic conditions.

Claim 11 (original): The method according to claim 10, wherein the nucleotide sequence is a nucleotide sequence corresponding to the derivative in the oligonucleic acid.

Claim 12 (currently amended): The method according to claim 10-or-11, wherein the mutagenesis generates a mutation to uracil.

Claim 13 (currently amended): A mutagenic agent for a nucleotide sequence, which comprises at least one member selected from the group consisting of the derivative according to any one of claims 1 to 3

a thionucleoside-S-nitrosyl derivative of the following Formula (I) or a salt thereof:

$$N$$
 N
 N
 N
 N
 R^2
 R^1

[wherein R^1 represents ribose, 2-deoxyribose or a derivative of either, and R^2 represents a hydrogen atom, an amino group, a hydroxyl group, a halogen atom, a R^3 -oxy group or a R^3 -amino group (wherein R^3 represents an optionally substituted C_{1-15} alkyl group or an optionally substituted C_{1-15} acyl group)];

a thionucleoside-S-nitrosyl derivative of the following Formula (II) or a salt thereof:

Application No. Not Yet Assigned Amendment dated October 21, 2005 First Preliminary Amendment

[wherein R¹ represents ribose, 2-deoxyribose or a derivative of either, and R² represents a hydrogen atom, an amino group, a hydroxyl group, a halogen atom, a R³-oxy group or a R³-amino group (wherein R³ represents an optionally substituted C_{1-15} alkyl group or an optionally substituted C_{1-15} acyl group)];

a thionucleoside-S-nitrosyl derivative of the following Formula (III) or a salt thereof:

(wherein R¹ represents ribose, 2-deoxyribose or a derivative of either, and R² represents an oxygen atom, a sulfur atom or an imino group);

and thean oligonucleic acids comprising the derivative according to formula I; an oligonucleic acid comprising the derivative according to formula II; and an oligonucleic acid comprising the derivative according to formula IIIaccording to claims 7 and 8.

Claim 14 (currently amended): A mutagenesis kit for a nucleotide sequence, which comprises at least one member selected from the group consisting of the derivative according to any one of claims 1 to 3

a thionucleoside-S-nitrosyl derivative of the following Formula (I) or a salt thereof:

$$\begin{array}{c|c}
 & NO \\
 & N \\
 & N \\
 & N \\
 & R^2
\end{array}$$
(I)

[wherein R^1 represents ribose, 2-deoxyribose or a derivative of either, and R^2 represents a hydrogen atom, an amino group, a hydroxyl group, a halogen atom, a R^3 -oxy group or a R^3 -amino group (wherein R^3 represents an optionally substituted C_{1-15} alkyl group or an optionally substituted C_{1-15} acyl group)];

a thionucleoside-S-nitrosyl derivative of the following Formula (II) or a salt thereof:

[wherein R¹ represents ribose, 2-deoxyribose or a derivative of either, and R² represents a hydrogen atom, an amino group, a hydroxyl group, a halogen atom, a R³-oxy group or a R³-amino group (wherein R³ represents an optionally substituted C_{1-15} alkyl group or an optionally substituted C_{1-15} acyl group)];

a thionucleoside-S-nitrosyl derivative of the following Formula (III) or a salt thereof:

(wherein R¹ represents ribose, 2-deoxyribose or a derivative of either, and R² represents an oxygen atom, a sulfur atom or an imino group);

an oligonucleic acid comprising the derivative according to formula I; an oligonucleic acid comprising the derivative according to formula II; and an oligonucleic acid comprising the derivative according to formula III.

and the oligonucleic acids according to claims 7 and 8.

Claim 15 (new): An oligonucleic acid comprising the derivative according to claim 2 or a salt thereof.

Claim 16 (new): An oligonucleic acid comprising the derivative according to claim 3 or a salt thereof.

11

Docket No.: 09857/0203487-US0

Claim 17 (new): The oligonucleic acid according to claim 15, which has a length of at least 12 bases.

Claim 18 (new): The oligonucleic acid according to claim 16, which has a length of at least 12 bases

Claim 19 (new): A method for transferring a nitrosyl group, which comprises reacting the oligonucleic acid according to claim 15 with its complementary strand to transfer the nitrosyl group contained in the oligonucleic acid to a corresponding base in its complementary strand.

Claim 20 (new): A method for transferring a nitrosyl group, which comprises reacting the oligonucleic acid according to claim 16 with its complementary strand to transfer the nitrosyl group contained in the oligonucleic acid to a corresponding base in its complementary strand.

Claim 21 (new): A method for mutagenesis of a nucleotide sequence, which comprises reacting the oligonucleic acid according to claim 15 with its complementary strand, and treating the resulting reaction product under acidic conditions.

Claim 22 (new): A method for mutagenesis of a nucleotide sequence, which comprises reacting the oligonucleic acid according to claim 16 with its complementary strand, and treating the resulting reaction product under acidic conditions.

Claim 23 (new): The method according to claim 21, wherein the nucleotide sequence is a nucleotide sequence corresponding to the derivative in the oligonucleic acid.

Claim 24 (new): The method according to claim 22, wherein the nucleotide sequence is a nucleotide sequence corresponding to the derivative in the oligonucleic acid

Claim 25 (new): The method according to claim 23, wherein the mutagenesis generates a mutation to uracil.

Claim 26 (new): The method according to claim 24, wherein the mutagenesis generates a mutation to uracil.